

DIASAMIDZE, L.N.; DZHANGIDZE, A.M.

Basic devices for preparing the engineering conditions in constructing underground street water supply and sewerage systems in teh populated places of the Georgian S.S.R. [in Georgian with summary in Russian]. Trudy Inst. stroi. dela AN Gruz. SSR 4:111-133 '53. (MLRA 9:10)

(Georgia--Underground construction)

DIASAMIDZE, L.N.; DZHANGIDZE, A.M.

~~XXXXXXXXXXXXXXXXXXXX~~

Causes of damage to concrete and brick sewage conduits and counter-measures [in Georgian with summary in Russian]. Trudy Inst.stroi. dela AN Gruz.SSR 5:193-212 '55. (MLRA 9:8)

(Sewer pipe)

DIASAMIDZE, L.N.

DIASAMIDZE, L.N.; KUTATELADZE, K.A.

Cave waters as water-supply sources in the Georgian S.S.R.

Trudy GPI no.6:77-84 '56.

(MIRA 11:2)

1.Kafedra vodosnabzheniya i kanalizatsii Gruzinskogo politekhnicheskogo instituta im. S.M. Kirova, Tbilisi.

(Georgia--Water, Underground)

DIASAMIDZE, O. G.

DIASAMIDZE, O. G. --"Investigation of the Moscow Limestone Deposits of Various Lithological Types of the Myashkov Stratum for Use in High-way Asphalt Concrete." Min Higher Education USSR. Moscow, 1955. (Dissertation for the Degree of Candidate in Technical Sciences.)

So.: Knizhnaya Litopis', No. 7, 1956.

DIATKINA, M. Ye. and SYRKIN, Y.

"The Biradical State of Hydrocarbons," Acta Physicochimica, 21, No.1,
1946.

Karpov Inst. of Phys. Chem., Moscow

DIATKINA, M.Ye. [translator].

~~Structure of boron hydrides. W.N.Lipscomb, W.Eberhardt, B.Crawford~~
(from J.Chem.Phys., 22, 985, 989, 1954). Translated by M.E.Diatkina.
Usp.khim.25 no.10-1249-1266 0 '56. (MLRA 9:12)
(Boron hydrides) (Lipscomb, W.N.) (Eberhardt, W.)
(Crawford, B.)

GRIGOR'YEV, Ivan Ivanovich; DIATROPTOV, Boris Grigor'yevich; PLYSHEVSKAYA, Nadezhda Ivanovna; KUROVSKIY, F.M., nauchnyy red.; KOBRINSKAYA, M.V., red.; SUSHKEVICH, V.I., tekhn.red.

[Teaching theoretical mechanics in a technical school] Prepodavanie teoreticheskoi mekhaniki v tekhnikum. Moskva, Vses.uchebno-pedagog. izd-vo Proftekhizdat, 1960. 241 p. (MIRA 13:3)
(Mechanics, Analytic--Study and teaching)

DIATROPTOV, B.G.

PHASE I BOOK EXPLOITATION

SOV/4128

Grigor'yev, Ivan Ivanovich, Boris Grigor'yevich Diatroptov, and Nadezhda Ivanovna Plyshevskaya

Prepodavaniye teoreticheskoy mekhaniki v tekhnikum (The Teaching of Theoretical Mechanics in Tekhnikums) Moscow, Proftekhizdat, 1960. 243 p. 4,000 copies printed.

Scientific Ed.: G.M. Kurovskiy; Ed.: M.V. Kobrinskaya; Tech. Ed.: V.I. Sushkevich

PURPOSE: This book is recommended as a training manual for teachers at special secondary technical schools by the Training and Methods Direction for Special Secondary Institutions of the Ministry of Special Technical Colleges and Secondary Education in the USSR.

COVERAGE: The book discusses a number of general problems in the teaching of mechanics and also special methods of presentation (under the conditions of a tekhnikum) of individual topics. The limited size of this manual does not permit consideration of special methods for all topics of the course; therefore, the topics selected were those most difficult to teach. The topics treated are

Card 1/4

The Teaching of Theoretical Mechanics in Tekhnikums

SOV/4128

statics, which gives the students ability and skill in solving problems for systems in equilibrium, including the foundations of graphical statics; kinematics, which discusses various types of motion and examples of their application in engineering; dynamics, in which only the most essential problems are singled out; and elements of the theory of mechanisms and machines, which is quite thoroughly covered. No personalities are mentioned. There are 60 references: 58 Soviet and 2 German.

TABLE OF CONTENTS:

Introduction	3
GENERAL PART	
1. Aims, problems, and special features of teaching theoretical mechanics with elementary theory of mechanisms and machines at tekhnikums	6
2. Planning the teaching process	12
3. Presentation of new material	17
4. Impressing the material on the students' memory	27
5. Written tests on mechanics	30

Card 2/4

Diatroptov, D.B.

SHOENBERG, D.; DIATROPTOV, D.B., [translator]; SHAL'NIKOV, A.I., redaktor;
NAKHIMSON, I.G., redaktor; NIKIFOROVA, A.N., tekhnicheskij redaktor.

[Superconductivity. Translated from the English] Sverkhprovodimost'.
Perevod s angliiskogo D.B.Diatroptova. Pod red. A.I.Shal'nikova.
Moskva, izd-vo inostrannoi lit-ry, 1955. 288 p. (MLRA 9:4)
(Electric conductivity) (Low temperature research)

DIATROPTOV, D.B., KOLGANOV, V.Z., LEBEDEV, A.V., NIKITIN, S. Ya.,
SMOLYANKIN, V.T., and SOKOLOV, A.P., (Acad. Sci. USSR)

"Slow Neutrons Scattering By Ortho- and Para-Tritium."

paper submitted at the All-Union Conf. on Nuclear Reactions in Medium and
Low Energy Physics, Moscow, 19-27 Nov 57.

82907

S/120/60/000/02/038/052
E032/E414

24.5600

AUTHOR: Diatroptov, D.B.

TITLE: A Gas Analyser¹ Based on the Measurement of Thermal Conductivity¹ in the Pressure Range 5 to 10 mm Hg

PERIODICAL: Pribery i tekhnika eksperimenta, 1960, Nr 2,
pp 139-140 (USSR)

ABSTRACT: The gas analyser described in the present paper was designed for use in the ortho-para analysis of tritium. The usual bridge circuit for a gas analyser is shown in Fig 1, I. The standard and working elements R_c and R_p are thermostated with the aid of liquid nitrogen, since in this temperature region the difference in the specific heats and, consequently, the thermal conductivities of ortho- and para- modifications of tritium are large (the maximum occurs at 55°K). The final arrangement used in the present work is similar to that described by Geib and Harteck (Ref 4) and is shown in Fig 1, II. One of the bridge elements is thermostated at a temperature a little above room temperature, and the other is thermostated at liquid nitrogen temperature. At the former temperature the

Card 1/3

82907

S/120/60/000/02/038/052

E032/E414

A Gas Analyser Based on the Measurement of Thermal Conductivity
in the Pressure Range 5 to 10 mm Hg

thermal conductivities of ortho and para tritium are the same, while at the latter temperature the difference between the thermal conductivities is large. The two elements are connected together as shown, so that pressure changes take place simultaneously in the two gas chambers and are to some extent compensated. The resistance $R_{\text{доб}}$ was chosen so that the off-balance signal in the pressure range 5 to 8 mm Hg is as little dependent on pressure as possible. The circuit parameters were as follows: $R_c = R_p = 96$ ohm, with filament temperature of 41°C , $R_1 = 80.5$, $R_2 = 58$ and $R_{\text{доб}} = 36$ ohm. The current through each of the arms of the bridge was 200 mamp. In order to obtain reproducible results, the current was stabilized to a relative accuracy of 10^{-5} . The bridge elements were thermostated to better than 0.01° . The glass gas system was carefully evacuated before the gas was introduced, which ensured reproducibility of the results to within ± 0.5 mV. The calibration of the

Card 2/3

82907

S/120/60/000/02/038/052

E032/E414

A Gas Analyser Based on the Measurement of Thermal Conductivity
in the Pressure Range 5 to 10 mm Hg

analyser for ortho-para tritium concentration is linear and corresponds to 0.40 mV per 1% of ortho-tritium. Calibration for ortho-para hydrogen gives 1.82 mV per 1% of ortho-hydrogen. The analyser was also calibrated for mixtures of foreign gases. Thus, for example, the He^3 calibration gives 1.65 mV per 1% of He^3 in tritium. In Fig 2, curve a corresponds to a $\text{H}_2 + \text{T}_2$ mixture (high temperature ortho-para composition) and curve b corresponds to a $\text{H}_2 + \text{T}_2 + \text{HT}$ mixture in equilibrium at room temperature. (The off-balance signal is plotted along the vertical axis and the % concentration of tritium along the horizontal axis.) There are 2 figures and 4 references, 2 of which are Soviet, 1 English and 1 German.

This is an an abridged translation.

ASSOCIATION: Institut fizicheskikh problem AN SSSR
(Institute for Physical Problems, AS USSR)

SUBMITTED: February 11, 1959

Card 3/3

ACCESSION NR: AT4015879

S/3055/63/000/002/0148/0156

AUTHOR: Diatroptov, D. B.

TITLE: Secondary electron emission of copper and certain coatings

SOURCE: AN SSSR. Fizicheskaya laboratoriya. Elektronika bol'shikh moshchnostey (High-power electronics), no. 2, 1963, 148-156

TOPIC TAGS: secondary electron emission, copper, microwave oscillator, high power microwave oscillator, oil vapor vacuum system, cup-alloy, beryllium bronze, electron bombardment, ion bombardment, chemical surface finish, mechanical surface finish

ABSTRACT: In view of the uncertainty in the data on secondary emission from various materials used in the construction of microwave oscillators of high power, measurements were made of the secondary emission from targets under the vacuum and other conditions prevailing in the laboratory. The results are particularly of interest when

Card 1/3

ACCESSION NR: AT4015879

it comes to the construction of dismountable electrovacuum system with oil-vapor pumps and rubber gaskets. The secondary emission coefficient of copper, cupalloy, and beryllium bronze were measured under vacuum conditions characteristic of large installations. The influence of electron and ion bombardment on secondary emission and of the chemical and mechanical state of the surface is thoroughly considered. Several methods of treating the copper surface prior to the bombardment were tested. The secondary emission coefficient varies between 2.2 and 1.2, depending on the temperature, the surface conditions, and the applied voltage. "The author is grateful to P. L. Kapitsa for suggesting the problem and for interest in the work, to N. N. Mikhaylov for chemical finishing of the samples, and to A. G. Molchanov for help with the measurements." Orig. art. has: 8 figures.

ASSOCIATION: Fizicheskaya laboratoriya AN SSSR (Physics Laboratory, AN SSSR)

Cord 2/1

ACCESSION NR: AT4015880

S/3055/63/000/002/0157/0166

AUTHORS: Vetchinkin, A. N.; Diatroptov, D. B.; Zhdanov, K. A.;
Nedelyayev, A. P.

TITLE: Dosimeter for electromagnetic oscillations in the decimeter
band

SOURCE: AN SSSR. Fizicheskaya laboratoriya. Elektronika bol'shikh
moshchnostey (High-power electronics), no. 2, 1963, 157-166

TOPIC TAGS: dosimeter, microwave equipment radiation, stationary
dosimeter, portable dosimeter, alarm dosimeter, flux density measure-
ment, incident energy measurement

ABSTRACT: A special dosimeter is described for use around high-
power microwave generators. Unlike standard dosimeters, this re-
quires fewer manual operations and is more automatic. The dosimeter
antenna is a 3 cm loop loaded by a crystal detector through a dissi-

Card 1/3

ACCESSION NR: AT4015880

pative attenuator. The dosimeters operate with continuous oscillation only (pulsed operation of the generator may spoil the dosimeter) and come in three types. The loop efficiency is approximately 7%. Three types of dosimeters are described: (1) stationary with mechanical displacement of loop (to eliminate the effect of standing waves in the room), which reads the energy flux density (from 20 to 200,000 microwatt per square centimeter) and which integrates the incident energy (from 0.001 to 10 J/cm²); (2) pocket type, which integrates the incident energy from 0.01 to 100 J/cm² at a flux density from 0.1 to 10 mW/cm²; (3) portable sound alarm, which produces a signal at a set power flux level from 0.1 to 1 mW/cm². The stationary dosimeter uses vacuum tubes, while the pocket and sound-signal dosimeters are transistorized and fed from dry cells. "The authors are grateful to P. L. Kapitsa for support of this work and to V. P. Peshkov for many valuable hints. "Orig. art. has: 6 figures and 3 formulas.

Card 2/3

ACCESSION NR: AT4015880

ASSOCIATION: Fiziches'kaya laboratoriya AN SSSR (Physics Laboratory,
AN SSSR)

SUBMITTED: 00

DATE ACQ: 25Jan64

ENCL: 00

SUB CODE: GE, SD

NR REF SOV: 000

OTHER: 000

Card 3/3

DIATYAN, G. [Diatian, H.], arkhitektor; SHELUD'KO, L., inzh.

Gigantic gider. Znan. ta pratsia no.10:23 0 '61.

(MIRA 14:8)

(Ukraine—Factories—Design and construction)

DIATYAN, G., inzh.; NESTERENKO, I., inzh.; TATSIY, Ye., arkhitekt

Universal one-story industrial building. Prom.stroi.i inzh.soor.
4 no.1:5-10 Ja-F '62. (MIRA 15:8)
(Industrial buildings) (Precast concrete construction)

DIATYAN, G., inzh.

Efficient design of the frame of a railroad bearings plant.
Prom.stroi.i inzh.soor. 4 no.5:14-19 S-O '62. (MIRA 16:1)
(Industrial buildings—Design and construction)

DIAZ, J.B.; VYBORNÝ, R.

See also 86-00513R000410320012-8

A mean value theorem for strongly continuous vector valued functions.
Chekhosl mat zhurnal 14 no. 2:322-323 '64.

1. Institute for Fluid Dynamics and Applied Mathematics, College
Park, Maryland (for Diaz). 2. Institute of Mathematics,
Czechoslovak Academy of Sciences, Prague 1, Zitna 25 (for Vyborny).

Country : CZECHOSLOVAKIA
 Category : Experimental Animal Physiology.
 Metabolism. Vitamins.
 Abs. Jour. : Ref Zhur-Piol., No 23, 1957, 106225
 Author : Dibek, O.
 Institut. : -
 Title : The Biological Value of Various Vitamin C Forms.
 Animal Experiments. I. The Biological Value of
 Various Vitamin C Forms in Early Stages of C-
 Orig. Pub. : Bratisl. lekar. listy, 1957, 2, No 6, 513-525
 Abstract : Guinea pigs which were kept for 5 days on rations lacking vitamin C, received adequate quantities of vitamin C of various origin for the next 6 days. Control guinea pigs were given rations lacking vitamin C for 11 days. With chemical methods and by determining the animals' weight increases, the high biological value of vitamin C obtained from lemon juice was shown, as well as the latter's superior effect upon the organism of guinea pigs as compared with
 Card: 1/2
 *Avitaminosis.
 22

Country : CZECHOSLOVAKIA
 Category : Human and Animal Physiology. T
 Metabolism. Vitamins.
 Abs. Jour. : Ref Thyr-Biol., No 21, 1970, 106225
 Author :
 Institut. :
 Title :
 Orig Pub. :
 Abstract :
 (cont) synthetic C preparations. However, the biological value of synthetic C preparations was greater than of C obtained from enriched tomato paste. Differences in C amounts being discharged with urine in animals which were given various kinds of C were not observed as compared to control animals. At early stages of avitaminosis, C content became significantly lowered in the organism.
 Card: 2/2

DIBAK, O.

~~-----~~
A new type of cages for the determination of metabolism in small laboratory animals. Cesk. fysiол. 6 no.4:541-543 Nov 57.

1. Fysiologicke oddelenie Ustavu pre vyskum vyzivy ludu, Bratislava.

(METABOLISM

cage for determ. of metab. of various substances in small animals (Cz))

CZECHOSLOVAKIA/Human and Animal Physiology (Normal and
Pathological). Metabolism. Vitamins.

T

Abs Jour : Ref Zhur Biol., No 6, 1959, 26281

Author : Dibak, O.

Inst : -

Title : Biological Value of Various Forms of Vitamin C: Experi-
ments with Animals. II. Biological Value of Various
Forms of Vitamin C on the 10th Day of C-Avitaminosis.

Orig Pub : Dratsl. lekar listy, 1958, 1, No 6, 332-341

Abstract : To growing guinea pigs which received, for the duration
of 10 days, C-avitaminose feed with the aid of a tube,
vitamin C from various sources was introduced. Vitamin
C from lemon juice was better absorbed and was more effec-
tive than synthetic C. Biological value and effectiveness
of C from wild rose concentrates were about the same. C
from tomato concentrate was utilized worst of all.

Card 1/1

CZECHOSLOVAKIA/Human and Animal Physiology (Normal and Pathological).T
Metabolism. Vitamins.

Abs Jour : Ref Zhur Biol., No 6, 1959, 26202

Author : Dibak, O.

Inst : -

Title : Biological Value of Various Forms of Vitamin C. Experiments on Animals. III. Biological Value of Various Forms of Vitamin C on the 15th day of C Avitaminosis.

Orig Pub : Bratisl. lekar. listy, 1958, 1, No 9, 529-537

Abstract : To guinea pigs, after 15-day maintenance on C-avitaminose rations, equivalent amounts of vitamin C from various sources was given in the course of 6 days. At this stage of avitaminosis, only an insignificant differences in effectiveness and utilization of C from lemon juice and synthetic C was discovered; no difference was discovered in the biological value of C from lemon juice and tomato concentrate.

Card 1/1

- 12 -

CZECHOSLOVAKIA/Human and Animal Physiology (Normal and
Pathological). Metabolism. Vitamins.

T

Abs Jour : Ref Zhur Biol., No 6, 1959, 26283

Author : Dibak, O.

Inst :

Title : Biological Value of Various Forms of Vitamin C. Experi-
ments on Animals. IV. Biological Value of Vitamin C
From Various Sources at Late Stages of Avitaminosis C.

Orig Pub : Bratisl. lekar. listy, 1958, 1, No 10, 584-592

Abstract : To guinea pigs, after 20-day maintenance on C avitami-
nose rations, equivalent amounts of vitamin C from various
sources was given in the course of 10 days. Most effec-
tive was C from lemon juice. Differences in condition
of C from lemon juice, tomato concentrate, and synthetic
C were not found. The content of C in the organs of
animals which received C was balanced. Therapeutic ef-
fect was produced by C from all sources in the amount of
3 mg of C daily per animal.

Card 1/1

DIBAK, O.; GINTER, E.

Effect of nutritional factors on the fluorine balance of fluorinized rats, p. 402.

ČESKOSLOVENSKÁ HYGIENA. Praha, Czechoslovakia. Vol. 4, no. 7, Aug. 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 1, January 1960.

Uncl.

CZECHOSLOVAKIA/Human and Animal Physiology (Normal and
Pathological) Metabolism. Vitaminus.

T

Abs Jour : Ref Zhur Biol., No 6, 1959, 26284

Author : Dibak, O.

Inst :

Title : Biological Value of Various Forms of Vitamin C. Experi-
ments on Animals. V. The Content of Vitamin C in Deve-
lopment of Scurvy. Dynamics of Content of Vitamin C
Testoration at Various Stages of Avitaminosis C

Orig Pub : Bratisl. lekar. listy, 1958, I, No 11, 648-659

Abstract : On the 11-26th days of C avitaminosis (A), the degree of
decrease of vitamin-C content in separate organs increased
in parallel in guinea pigs. At the early stage of A (up
to 10th day), the greatest decrease of C content was noted
in adrenals, spleen and kidneys, the least in the brain
and small intestine. At later stages of A, the decrease
of C content in separate organs slowed down. After

Card 1/2

- 13 -

CZECHOSLOVAKIA/Human and Animal Physiology (Normal and
Pathological). Metabolism. Vitamins.

T

Abs Jour : Ref Zhur Biol., No 6, 1959, 26284

repeated loading of guinea pigs with A with C, the content of C normalized quickest in the brain and small intestine. The concentration of C in blood serves as a sufficiently precise index of organism saturation with C only at the early stage of A; in later stages of A, the decrease of C concentration in blood slows down and does not correspond to the actual organism saturation with C.

Card 2/2

DIBAK, O.; GINTER, Ye. (Bratislava)

Protective effect of food substances in fluorine poisoning.
Vop.pit. 18 no.4:3-11 J1-Ag '59. (MIRA 12:10)

1. Iz fiziologicheskogo otdeleniya Instituta issledovaniya
pitaniya naroda (dir.A.Buchko), Bratislava, Chekhoslovariya.
(DIETS, in var. dis.
fluorine pois., review (Rus))
(FLUORINE, pois.
dietetic ther., review (Rus))

BROZMAN, B.;DIBAK, O.;KOTULIAK, V.;NEMEC, R.

Changes of carbohydrate metabolism in conditionally and unconditionally applied low pressure. Cesk. fysiол. 9 no.1:4-6 Ja 60.

1. Fyziologicke oddelenie Ustavu pre vyskum vyzivy ludu. Fyziologicky ustav Lek. fak. UK Bratislava.

(ANOXIA exper.)

(CARBOHYDRATES metab.)

DIBAK, O.; BROZMAN, B.; KOTULIAK, V.; NEMEC, R.

Relation of vitamin C to certain physiological functions in conditions of lowered atmospheric pressure. Cesk. fysiол. 9 no.1:7-8 Ja 60.

1. Fyziologické oddelenie Ústavu pre výskum výživy ľudu. Fyziologický ústav Lek. fak. UK., Bratislava.

(VITAMIN C pharmacol.)

(CARBOHYDRATES metab.)

(ERYTHROCYTE COUNT)

(ANOXIA exper.)

KOTULIAK, V.; BROZMAN, B.; DIRAK, O.

Effect of low atmospheric pressures applied by means of a conditioned and unconditioned methods on certain blood indices in guinea pigs.
Cesk. fysiolo. 9 no.1:28-30 Ja 60.

1. Fyziologicke oddelenie Ustavu pre vyskum vyzivy ludu. Fyziologicky ustav Lek. fak. UK, Bratislava.

(ATMOSPHERIC PRESSURE)

(BLOOD CELLS)

(REFLEX CONDITIONED)

DIBAK, Otokar

Biological role of fluorine in the organism. Cas.lek.cesk. 99
no.9:Lek.veda zahr.30-38 26 F '60.

1. Fyziologicke oddelenie Ustavu pre vyskum vyzivy lidu v Bra-
tislave, riaditel MUDr. A. Brcko.
(FLUORINE metab.)

alibak, Otokar

alibak, Otokar

Country: Czechoslovakia

Academic Degrees:

Affiliation: Physiological Section (Fyziologicalne oddelenie) of the Nutrition Research
Institute (Ustav pre vyslum vysivy ludu), Bratislava

Source: Prague, Czechoslovakian Hygiene, No 4, May 61, pp 229-232

Data: "Influences of Chronic and Acute Fluoride Intoxication on Amino Acid Metabolism in
the Liver of Rats"

Co-author:

alibak, Otokar, Physiological Section of the Nutrition Research Institute, Bratislava (see above)

670 00100

DIBAK, OTAKAR

SURNAMES, Given Names

Country: Czechoslovakia

Academic Degrees: (not given)

Affiliations:

Source: Prague, Czechoslovak Stomatologic, Vol 61, No 1, July 1971, pp 246-250

Data: "Study of Permanent Dentition in Persons with History of Long Exposure to High Concentration of Fluorine Ions"

DIBAK, Otakar

Department of Physiology, Human Nutrition Research Institute (Fysiologicko-
nutricni ustavu pre vyskum vysivy ludu) /Director C.Sc. A. BLEKED/ Bratislava

SEDUK, Michal

Stomatology Clinic, Charles University (Stomatologicka klinika UK)
/Director Docent B. VELCOŠ/ , Bratislava

DIBAK, O.

1. "Zvezda NITELNY (10 Feb 1973 - 9 Mar 1982)" [obituary], Darya N. N. KRYLOV, president of the SAV (Slovenska Akademika vied); Slovenska Akademika vied (Slovak Academy of Sciences) pp 555-586.
2. "Analysis of the Splenic Atrophy into the Embryonal Development," by O. DIBAK, of the Neurophysiological Section of the Institute of Experimental Medicine (Slovak Academy of Sciences), Bratislava; Prilohy k Acta Medica et Biologica (Prilohy k Acta Medica et Biologica) pp 594-596 (English summary).
3. "Conditioned-Reflex Changes in the Glycogen Metabolism under the Effect of Short-Lasting Hypotension," by O. DIBAK, J. Berman, V. D. GILIK, J. KENTIS, and R. KOCIC. From the Physiological Department of the Faculty of Medicine, Institute of Experimental Medicine (Slovak Academy of Sciences), Bratislava; Prilohy k Acta Medica et Biologica (Prilohy k Acta Medica et Biologica) pp 597-598 (English summary).
4. "The Balance Thresholds of Spreading Depression in the Hypocretal Nucleus of the Hypothalamus," by J. DIBAK and D. ZAMRANOVA. From the Department of Experimental Medicine (Slovak Academy of Sciences), Bratislava; Prilohy k Acta Medica et Biologica (Prilohy k Acta Medica et Biologica) pp 602-610 (English summary).
5. "The Conditioning of the Vasodilation in the Aerial Regions of the Body Produced by a Single Deep Breath," by I. RUTAY-GONDO and R. KOCIC. From the Faculty of Medicine (Slovak Academy of Sciences), Bratislava; Prilohy k Acta Medica et Biologica (Prilohy k Acta Medica et Biologica) pp 611-612 (English summary).
6. "The Hemodynamic Relations Between the Magistral and the Persistent Part of the Arteries," by K. GONDO and J. GONDO of the SAV Institute of Experimental Medicine (Slovak Academy of Sciences), Bratislava; Prilohy k Acta Medica et Biologica (Prilohy k Acta Medica et Biologica) pp 613-614 (English summary).
7. "Development of the Basic Problems of Aviation and Space Medicine," by B. HODNY, A. HODNY and O. DIBAK. From the Physiological Department of the Faculty of Medicine (Slovak Academy of Sciences), Bratislava; Prilohy k Acta Medica et Biologica (Prilohy k Acta Medica et Biologica) pp 615-616 (English summary).

BROZMAN, B.; BRIATKA, A.; DIBAK, O.

On the development and basic problems of aviation and space medicine.
Bratisl. lek. listy 42 no.10:626-632 '62.

1. Z Katedry fyziologie Lek. fak. Univ. Komenskeho v Bratislave,
veduci clen korezp. Slovensky akademie vied prof. J. Antal, Dr. Sc.,
a z Fyziologickeho oddelenia Ustavu pre vyskum vyzivy ludu v
Bratislave, riaditel MUDr. A. Bucko, C. Sc.

(AVIATION MEDICINE) (SPACE FLIGHT)

DIBAK, O.; BUCKO, A.; KORTUS, J.; KOTULIAK, V.; technicka spolupraa:
SPUSTOVA, D.; CHOBO TOVA, M.; BABUSIK, I.

Protective diets and metabolism of some elements in subjects exposed
to fluorine ions. Bratisl. Lek. Listy 43 no.2:77-88 '62.

1. Z Ustavu pre vyskum vyzivy l'udu v Bratislave, riaditel' MUDr.

A. Bucko, C. Sc.

(FLUORINE toxicol)	(ALUMINUM metab)
(CALCIUM metab)	(PHOSPHORUS metab) (DIETS)

DIBAK, O.; KOTULIAK, V.; LICKO, T.; NEMEC, R.

Vitamin C and its effect on the carbohydrate metabolism following injury. Bratisl. Lek. Listy 42 no.12:722-727 '62.

1. Z Ustavu pre vyskum vyziwy l'udu v Bratislave, riaditel' MUDr. A. Bucko, C. Sc., a z II. chirurgickej kliniky Lek. fak. Univ. Komenského v Bratislave, veduci akademik K. Siska.
(VITAMIN C pharmacol) (CARBOHYDRATES metab)
(WOUNDS AND INJURIES exper)

DIBAK, O.; BROZMAN, B.; KOTULIAK, V.; KORTUS, J.; NEMEC, R.; Technicka spolu-
praca SPUSTOVA, D.; CHOBOTOVA, M.

Conditioned reflex changes in the glycid metabolism in hypotension
of short duration. Bratisl. lek. listy 42 no.10:594-602 '62.

1. Z fyziologickeho oddelenia Ustavu pre vyskum vyzivy ludu v
Bratislave, riaditel MUDr. A. Bucko, C. Sc., a z Fyziologickeho ustavu
Lek. fak. Univ. Komenskeho v Bratislave, veduci clen koresp. Slovensky
akademie vied J. Antal, Dr.Sc.

(REFLEX CONDITIONED) (CARBOHYDRATES metab)
(ATMOSPHERIC PRESSURE)

KORTUS, J.; DIBAK, O.; KOTULIAK, V.; Technická spolupráca:
SPUSTOVA, D.; CHOBOTOVA, M.; BABUSIK, I.

Effect of various nutritional factors and fluorine ions on
aluminum retention in bony tissue of rats. Cesk. gastroent.
vz. 17 no.4:202-212 Je '63.

1. Fyziologické oddelenie Ústavu pre výskum výživy ľudu v
Bratislave, riaditeľ MUDr. A. Bucko, CSc.
(DIET) (BONE AND BONES) (ALUMINUM)
(FLUORINE) (VITAMIN D)

JAVORSKY, A.; DIBAK, O.; KORTUS, J.

Effect of partial hepatectomy on glycode metabolism in rabbits.
Bratisl. lek. listy 44 no. 1:8-14 '64.

1. Statne sanatorium v Bratislave (riaditel: MUDr. J. Rusnak, C.Sc.)
a Fyziologicke oddelenie Vyskumneho ustavu vyzivy ludu v
Bratislave (riaditel: doc. MUDr. O. Bucko, C.Sc.).

*

BROZMAN, B.; DIBAK, O.; BRIATKA, A.; KOTULJAK, V.

Conditioned reflex activation of antiregulatory mechanism in changes in blood sugar. Bratisl. lek. listy 77 no.9:547-553 15 N '64.

1. Katedra fyziologie lek. fakulty Univerzity Komenského v Bratislave (vodaci člen korešp. Slovenskej akadémie vied J. Antal, DrSc) a fyziologické oddelenie Ústavu pre výskum výživy ľudu v Bratislave (riaditeľ - doc. MUDr. A. Dacko, CSc.).

ALBERT, J.; DIBAK, O; KATZMAN, V.

OSKINOV, V. I.

Physiological Department of the Institute for Nutritional Research (Physiological Institute) Vsesoyuznyy Nauchnyy Tsentr, Bratislava (for all),
Travnyy, Goskhozizdat, No 1, 169, Pri-3
Calcium and Phosphorus Metabolism in Starved Rats
under the Influence of Large Doses of Vitamin D and
Calcium."

JAVORSKY, A.; DIBAK, O.

Ascorbic acid content of various organs of rabbits with liver cirrhosis. Bratisl. lek. listy 45 no.11:685-690 15 Ja '65.

1. Statne sanatorium v Bratislave (riaditel: MUDr. J. Rusnak, CSc.) a Fyziologicke oddelenie Ustavu pre vyskum vyziivy ludu v Bratislave (riaditel: doc. MUDr. O. Bucko, CSc.).

KORTUS, J.; DIBAK, O.; KOTULIAK, V. Technicka spolupraca: HRADSKA, M.;
BABUSIK, I.

Calcium and phosphorus metabolism in fluoridated rats under the
influence of large doses of vitamins and calcium. Cesk. hyg. 10
no.1:1-9 F '65

1. Fyziologicke oddelenie Ustavu pre vyskum vyzivy ludu, Bratislava.

DIBAK, O.; GROSSMANN, F.; KOTULIAK, V.

Effect of the fluorine ion on various indexes of carbohydrate metabolism in a chronic experiment. Bratisl. lek. listy 45 no.2:84-96 31 J1 '65.

1. Fyziologicke oddelenie Ustavu pre vyskum vyziivy ludu v Bratislave (riaditel doc. MUDr. A. Bucko, CSc.).

DIBAK, O.; GROSSMANN, F.; KOTULIAK, V.

The effect of the fluorine ion on the metabolism of the l-ascorbic acid under chronic experimental conditions. Bratisl. lek. listy 45 no.9:534-546 15 My'65.

1. Fyziologické oddelenie Ústavu pre výskum výživy ľudu v Bratislave (riaditeľ: doc. MUDr. A. Bucko, CSc.).

DIBAK, O.; GROSSMAN, F.; KOTULIAK, V.

Fluorine ion retention in experimental animals in relation to dosage and period of administration. Bratisl. lek. listy 45 no.8:469-478 31 0 '65.

1. Fyziologické oddelenie Ústavu pre výskum výživy ľudu v Bratislave (riaditeľ doc. MUDr. A. Bucko, CSc.).

CZECHOSLOVAKIA

KOTULIAK, Vladimir; DIBAK, Otokar; BROZMAN, Branko; Research Institute for Nutrition and Physiological Institute, Medical Faculty, Comenius University (Vyskumny Ustav Vyzivy Ludu a Fyziologicky Ustav Lekarskej Fakulty Univerzity Komenskeho), Bratislava.

"Changes in Blood Picture Caused by Hypoxia and Low Pressures."

Bratislava, Biologia, Vol 21, No 7, 1966, pp 503 - 511

Abstract: Adaptation changes in the blood system of an organism traumatized by various kinds of low pressures and hypoxia were studied in experiments on guinea pigs. Experiments lasted for 80 seconds, 28 minutes, 7 hours, and 1, 6, 12, 18, and 24 days. Extensive changes in the blood picture were found; these depend on the lowering of the pressure, available oxygen, and duration of the experiment. The increase in erythrocytes and in hemoglobin is most pronounced after 7 hours of exposure to low pressures. 4 Figures, 5 Tables, 4 Western, 7 Czech, 2 Russian, 2 Rumanian, 2 East German references. (Manuscript received 5 Jul 65).

1/1

DIBAN, E.

SHVETS', I.T.; DIBAN, E.; KONDAK, M.M.

The problem of contact heat exchange. Dop. AN URSR no. 5:345-350
'54. (MLRA 8:7)

1. Dlysniy chlen AN URSR (for Shvets'). 2. Institut teploenergetiki
AN URSR. (Heat--Conduction)

DIAN, E.P.

✓ 0514 ICHL-T/W-12 21
CONTACT HEAT TRANSFER BETWEEN MACHINE COM-
PONENTS. E. P. Dian, N. M. Kondac, and L. T. Shvets.
Translated by V. E. Brix from Izvest. Akad. Nauk S.S.S.R.
S, 63-70(1954). 50p.

ZLS amb

YEREMENKO, O.S.; DIBAN, Ye.P.

Increasing the efficiency and economy of steam and gas turbines.
Visnyk AN URSR 26 no.8:51-54 Ag'55. (MLRA 8:11)
(Turbines)

DIBAY, E. P.

Abst Journal: Referat Zhur - Mekhanika, No 3, 1957, 3165

Author: Dibai, E. P., Shvets', I. T.

Institution: None

Title: Concerning the Problem of Hydraulic Resistance and Heat Exchange in Capillary Channels

Original

Periodical: Dopevidi AN URSR, 1956, No 1, 50-53; Ukrainian; Russian resumé

Abstract: Report on the results of an experimental investigation of the hydrodynamic resistance and heat exchange in the case of motion of an incompressible liquid (air, $M < 0.15$) through capillary channels. It is stated that the ordinary qualitative laws that characterize the heat exchange and the hydraulic resistance remain in force.

Inot Heat Engineering AS Ukr SSR

Card 1/1

718000, Ye.P.

SHVETS', I.T., akademik.; DIBAN, Ye.P.; GERASHCHENKO, O.A.

Heat exchange in the herring bone blade fastening zone of rotors.
[with summary in English]. Dop. AN URSR no.1:38-41 '57. (MLRA 10:4)

1. Akademiya nauk URSR (for Shvets). 2. Institut teployenergetiki AN
URSR.

(Impellers) (Heat—Transmission)

S/196/62/000/010/026/035
E194/E155

AUTHORS: Shvets', I.T., Diban, Ye.P., Stradoms'kiy, M.V.,
and Selyavin, G.F.

TITLE: Determination of flow factors of rotating ducts

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika,
no.10, 1962, 17, abstract 10 G126. (Zb. prats' In-t
teploenerg. AN URSR, no.18, 1960, 16-27). (Ukr.,
with summary in Russian)

TEXT: Results are given of an experimental study of the flow
factor and hydraulic resistance of rotating ducts. When gas flows
through rotating ducts the flow factor and resistance depend very
much on the ratio of the peripheral speed at the centre of the
duct to the mean flow rate of gas in the duct. Empirical formulae
are given to determine these factors. The results could be used
in the design of disc cooling systems for gas turbines and in
calculation of the axial thrust in impulse turbines.
7 references.

[Abstractor's note: Complete translation.]

Card 1/1

DIBAY, E.A.; SHCHEGLOW, P.V.

~~SECRET~~

Fifth conference on cosmogony devoted to radio astronomy.

Astron. tsir. no. 158:26-27 Ap '55. (MIRA 8:9)

(Radio astronomy)

01607, E.A.

DIBAY, E.A.

Gravitational instability of a gas streak [with summary in English].
Astron. zhur. 34 no.6:954-956 N-D '57. (MIRA 11:2)

1. Gosudarstvennyy astronomicheskiy institut im. P.V. Shternberga.
(Gravitation)

DIBAY, E.A.

Investigating star chains. Astron. tsir. no. 186:15-16 N '57.
(MIRA 11:4)

1. Gosudarstvennyy astronomicheskiy institut imeni Shternberga.
(Stars--Clusters)

DIBAY, E. A., Cand Phys-Math Sci -- (diss) " ^{*Certain problems*} ~~A few questions~~
on the evolution of interstellar space." Mos, 1958. 6 pp.
Mos State Univ im M. V. Lomonosov, State Astron Inst im P. K.
Shternberg), 100 copies. Bibliogr at end of text (17 titles).
(KL, 9-58, 112)

- 4 -

3(1)

AUTHOR: Dibay, E.A.

SOV/155-58-2-29/47

TITLE: Investigation of Stellar Chains (Issledovaniye zvezdnykh tsepochek)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Fiziko-matematicheskiye nauki, 1958, Nr 2, pp 128-132 (USSR)

ABSTRACT: The present investigation of stellar chains in the nebula "North America" in the constellation of the swan is a more detailed elaboration of the results already published in "Astronomicheskiy Tsirkulyar" [Ref 14]. The author thanks Professor D.Ya. Martynov for giving the theme, and the Observatory in Abastuman for the advancement during the observations carried out by the author. There are 3 figures, and 14 references, 7 of which are Soviet, 4 American, and 3 German.

ASSOCIATION: Gosudarstvennyy astronomicheskiy institut imeni P.K.Shternberga
(State Astronomical Institute imeni P.K.Shternberg)

SUBMITTED: January 12, 1958

Card 1/1

DIRAY, E.A.

Comparison stars for Nova Cygni (1948). Per.zvezdy 12 no.5:376-378
N '58. (MIRA 13:9)

1. Gosudarstvennyy astronomicheskiy institut im.Shternberga.
(Stars, New)

8

3(1),3(6),24(3)

AUTHOR: Dibay, E.A.

SOV/33-35-2-9/21

TITLE: The Magnetogravitational Instability of an Infinite Cylinder
(Magnitogravitatsionnaya neustoychivost' beskonechnogo
tsilindra)

PERIODICAL: Astronomicheskiy zhurnal, 1958, Vol 35, Nr 2, pp 253-256(USSR)

ABSTRACT: The author continues the investigations carried out by him in [Ref 1] by consideration of the problem of the gravitational instability of an infinite gaseous cylinder in a homogeneous magnetic field parallel to the axis of the cylinder according to the theory of small vibrations. The author restricts himself to the investigation of the instability with respect to longitudinal vibrations. The principal result consists in the assertion that the instability does not depend on the presence of the magnetic field so that the criterion of the gravitational instability (without a magnetic field) is valid. Similar investigations are due to Chandrasekar [Ref 3] and Oganessian [Ref 4]. The application of the theory to a chain of globules formed as a result of the disintegration of a dark filament in Taurus

Card 1/2

The Magnetogravitatsional Instability of an
Infinite Cylinder

SOV/33-35-2-9/21

shows the sufficiency of the densities and masses of the
globules for the formation of stars by gravitational
condensation. The author thanks D.Ya.Martynov and S.B.
Pikel'ner for the discussion.

There are 16 references, 14 of which are Soviet, 1 English,
and 1 Swedish.

ASSOCIATION: Gosudarstvennyy astronomicheskiy institut imeni P.K.
Shternberga (State Astronomical Institute imeni P.K.
Shternberg)

SUBMITTED: June 19, 1957

Card 2/2

AUTHOR: Dibay, E.A. 33-35-3-15/27

TITLE: The Evolution of Globules in the Vicinity of Hot Stars
(Evolutsiya globul v okrestnostyakh goryachikh zvezd)

PERIODICAL: Astronomicheskiy zhurnal, 1958, Vol 35, Nr 3, pp 469-472 (USSR)

ABSTRACT: Starting from the observations of Bek [Ref 14] the author considers the following schematic process: The ionized gas (domain H II) surrounding a hot star extends into the domain H I of the neutral gas in the direction of a globule. At a certain moment the limit of ionization meets the globule and two waves arise which, depending on the initial conditions can be compression as well as decompression waves. Under the assumption that secondary reflections decay by and by in this process, the author investigates the dynamics of the described primary impact. The investigation is carried out graphically according to Courant-Friedrichs and shows that the shock wave compresses the globules whereby the unessential temperature increase will be quickly compensated by the cooling of the gas on the dust. This compression favors the possible transformation of the globules into a star. The described effect is intensified by the dissipation of energy from the impact wave

Card 1/2

The Evolution of Globules in the Vicinity of Hot
Stars

33-35-3-15/27

according to Kaplan [Ref 17] .
Finally the author shows that a star formation according to the
scheme of Oort [Ref 11] is not possible. The objections of the
author are already to be found in the paper of Lebedinskiy
[Ref 18] .
There are 3 figures, and 19 references, 5 of which are Soviet,
11 American, 1 English, and 2 Dutch.

ASSOCIATION: Gosudarstvennyy astronomicheskii institut imeni P.K.
Shternberga (State Astronomical Institute imeni P.K.Shternberg)

SUBMITTED: November 4, 1957

Card 2/2

3(1)
AUTHOR: Dibay, E.A. SOV/33-35-6-16/18
TITLE: An Investigation of the Open Cluster IC 1369
PERIODICAL: Astronomicheskiy zhurnal, 1958, Vol 35, Nr 6, pp 938-940 (USSR)
ABSTRACT: The author determines the photographic magnitudes and colour indices of 75 stars in the region of the cluster IC 1369. The luminosity function for the cluster was determined from star counts. The main mass of the cluster is formed by stars of spectral type F.
There are 5 figures, 2 tables and 3 references, 1 of which is Soviet, 1 American, and 1 Swedish.
ASSOCIATION: Gosudarstvennyy astronomicheskiy institut imeni P.K. Shternberga (State Astronomical Institute imeni P.K. Shternberg)
SUBMITTED: February 21, 1958

Card 1/1

DIBAY, E.A.

Star with high color index. Astron. tsir. no.189:14 F '58.

(MIRA 11:8)

1.Gosudarstvennyy astronomicheskiy institut im. P.K. Shternberga,
Moskva.

(Stars--Color)

DIRAY, E.A.

Second plenary meeting of the Committee on Stellar Astronomy.
Astron. tsir. no.189:27-28 F '58. (MIRA 11:8)
(Stars)

3.1570

(RSC)
SOV/33-37-1-3/31

AUTHOR:

Dibay, E. A.

TITLE:

Concerning the Origin of the Comet Shaped Nebulae

PERIODICAL:

Astronomicheskii zhurnal, 1960, Vol 37, No 1, pp
16-22 (USSR)

ABSTRACT:

Among many various forms in which galactic diffuse matter is observed, nebulae in the shape of fans or comets attract special attention. Observations indicate that these nebulae obey the following statistical regularities: (1) In many cases, the nucleus of such an object is a variable star of T tauri or RW Aurigae type; (2) Frequently these nebulae are associated with emission nebulae; (3) In the latter case the tip of the comet-shaped nebula is directed toward the star exciting the emission nebula. Thus, there is an analogy between comet-shaped nebulae and "gulls" or "elephant trunks" observed in diffuse nebulae. These structures appear at the boundaries between ionized and neutral

Card 1/2

Concerning the Origin of the Comet Shaped Nebulae

(5003)

SOV/33-37-1-3/71

hydrogen as a result of the retardation of the ionized front by denser condensations of the neutral gas. These circumstances suggest the explanation of the origin of comet-shaped nebulae: compression and a progressive increase of density leads to the formation of a star which begins to illuminate the comet-shaped cloud surrounding it, and the dark "trunk" becomes a bright comet-shaped nebula. There is one table (listing 15 nebulae of this type and giving the details of their structure); 2 figures; and 26 references, 10 Soviet, 1 German, 4 Dutch, 1 U.K. and 10 U.S. The 5 most recent U.S. and U.K. references are: 4 Thackeray, Monthly Notices Roy. Astron. Soc., 110, 343, 1950; D. Osterbrock, Astrophys. J., 125, 622, 1957; C. Wade, Rev. of Mod. Phys., 30, 946, 1958; G. Herbig, Astrophys. J., 128, 259, 1958; T. Menon, Astrophys. J., 127, 13, 1957.

ASSOCIATION:

Stenberg State Astronomical Institute (Obs. Astronomicheskoy in-t imeni P. K. Shternberga

SUBMITTED:
Card 2/2

July 16, 1959

S/033/60/037004/004/012

AUTHOR: Dibay, E.A., Tsitsin, F.A., and Sharov, A.S. ^{E032/E314}

TITLE: On the Application of the Virial Theorem to the Dynamics of Stellar Clusters

PERIODICAL: Astronomicheskii zhurnal, 1960, Vol. 37, No. 4, pp 659 - 664

TEXT: The so-called virial theorem, which connects the potential and kinetic energies of a stationary cluster, can be expressed in the form:

$$2T + \Omega = 0 \quad (1) .$$

For a stellar cluster, the kinetic energy is given by Eq (2), where m_i is the mass of a star, v_i is the velocity and r_{ik} the distance between stars i and k . Assuming, for simplicity, that the stellar masses in the cluster are the same, the potential energy is given by Eq (3), where $M = mn$ and represents the total mass of the cluster and R is a mean of the distances between the various stars and is given by Eq (4).

Card 1/5

S/033/60/037/004/004/012

E032/E314

On the Application of the Virial Theorem to the Dynamics of
Stellar Clusters

According to Ambartsumyan (Ref.1), \tilde{R} should be of the order of the radius of the cluster. Using Eq.(3), \tilde{R} can be written in the form given by Eq.(5). In order to calculate the potential energy, it is convenient to replace the discrete mass distribution by a continuous one and this does not introduce a large error if the number of stars is not too low. If the potential energy is defined as the energy necessary to remove all the stars to infinity, then the potential energy of spherically symmetric configurations is of the form given by Eq. (6) and hence the required expression for \tilde{R} is of the form given by Eq. (7). This formula can be used to calculate \tilde{R} for various models of stellar clusters. In the present paper, only those models are considered in which the density is finite in the centre and does not increase in the outward direction. For a uniform sphere in which the density is constant and independent of radius, $\tilde{R} = (5/6)a$, where a is the radius of the sphere. If the density varies according to

Card 2/5

S/033/60/037/004/004/012

E032/E314

On the Application of the Virial Theorem to the Dynamics of
Stellar Clusters

the law:

$$\rho(r) = \rho_0 (1 + r^2)^{-5/2}$$

then \tilde{R} is given by Eq.(9). Finally, if the density falls off exponentially with distance, then \tilde{R} is given by Eq.(10). \tilde{R}/a is plotted as a function of a in Fig. 1 for the last two models, respectively. The analysis is then applied to multi-layer distributions. For a two-layer distribution defined by:

$$\frac{a}{b} = \frac{\rho}{\rho_0} \leq 1 \quad \frac{\delta}{\rho} = \eta \leq 1,$$

where a and b are the radii and ρ and δ are the densities of the inner and outer zones, \tilde{R} is given by Eq. (11). Numerical calculations based on this formula are

Card 3/5

S/033/60/037/004/004/012
E032/E314

On the Application of the Virial Theorem to the Dynamics of
Stellar Clusters

given in Fig. 2 and Table 2. In the case of a three-layer
model, defined by:

$$\frac{b}{c} = m \leq 1 \quad \frac{\epsilon}{\rho} = \gamma \leq 1$$

where c and ϵ are the radius and the density of the
third zone, respectively, \tilde{R} is given by Eq. (12) and the
corresponding numerical calculations are given in Table 3
and Fig. 3. It is concluded from these calculations that the
quantity \tilde{R} is usually 0.3 - 0.6 of the radius. Since it
is usually assumed in the dynamics of stellar clusters that
 \tilde{R} is equal to the radius of the cluster, the characteristics
of clusters obtained from the virial theorem must be altered
in the light of the present results. The applicability of
the Virial theorem to stellar clusters still remains an open
question. ✓

Card 4/5

S/033/60/037/004/004/012
E032/E314

On the Application of the Virial Theorem to the Dynamics of
Stellar Clusters

There are 3 figures, 3 tables and 5 references: 4 Soviet and
1 English.

ASSOCIATION: Gos. astronomicheskiy in-t im. P.K. Shternberga
(State Astronomical Institute im. P.H. Shternberg)

SUBMITTED: November 16, 1959

Card 5/5

DIBAY, E.A.; TSITSIN, F.A.; SHAROV, A.S.

Letter to the editor. Astron.zhur. 38 no.3:566 My-Je '61.
(MIRA 14:6)

1. Gosudarstvennyy astronomicheskiy institut imeni P.K.Shternberga.
(Stars--Clusters)

DIBAY, E.A.

Origin of cometary nebulae. Astron. zhur. 40 no.5:795-798
S-O '63. (MIRA 16:11)

1. Gosudarstvennyy astronomicheskiy institut im. P.K. Shternberga.

ACCESSION NR: AP4043953

S/0033/64/041/004/0652/0656

AUTHOR: Dibay, E. A., Kaplan, S. A.

TITLE: Cumulative shock waves in interstellar space

SOURCE: Astronomicheskiy zhurnal, v. 41, no. 4, 1964, 652-656

TOPIC TAGS: astrophysics, interstellar space, shock wave, cumulative shock wave, interstellar gas, globule, star, nebula, Stromgren zone

ABSTRACT: Dense circular dust nebulae (globules) are frequently observed within H II emission regions. As a result of the sharp temperature difference between the globule and the surrounding ionized medium it is possible to expect its compression by a shock wave developing at the discontinuity. If the configuration of the globule is close to spherical the shock wave will have a cumulative character, that is, there will be focussing of the wave toward the center. If a dark nebula in a H II zone is greatly elongated it is also possible to have cylindrical cumulation. At the time of development of a type 0 star, causing the ionization of a surrounding nebula, a Strömgren zone is formed around it. If there are such dense fluctuations within the nebula that it cannot be penetrated by ionizing radiation, the H II zone will "bend around" such formations. The time required for establishment of the Strömgren zone is of the order of the time required for recombination

Card 1/3

ACCESSION NR: AP4043953

of the ionizing gas, that is, about 10^4 years at typical density values. Since the dimensions of globules are much less than the radius of a Strömgren zone, the time required for establishment of more or less identical temperature and pressure jumps along the entire surface of a globule is also correspondingly less. This pressure jump leads to a shock wave moving in the direction of lesser pressures, that is, into the center of the globule. This pressure wave should be characterized by the gas pressure in the H II zone (temperature T_2 and density ρ_2) and the state of the gas in the globule. If the density distribution in the globule is uniform ($\rho_0 = \text{const}$), the problem of movement of the shock wave can be considered by applying the theory of similarity. The following example is considered. Temperature in the H II region is $T_2 = 10,000^\circ\text{C}$, the gas temperature behind the shock wave front is $T_1 = 1,000^\circ\text{C}$, $\mu_2 = 1/2$, $\mu_1 = 1$. The temperature in the globule in comparison with T_2 is neglected. It is assumed that $\rho_2 = 1/2 \rho_0$ and $\rho_0 \theta_1 = 10$. Isothermal speed of sound in the H II zone is $\sqrt{\gamma T_2 / \mu_2} = 13 \text{ km/sec}$. Applying the

formulas cited in the text, the author obtains the following parameters of converging and reflected waves for a spherical case:

Card 2/3

ACCESSION NR: AP4043953

Density jump at front	U_s	2.16	10	Converging wave
Gas velocity behind front	V_s	0.24	0.67	Ditto
Shock wave velocity	η_s	0.45	0.75	Ditto
Density	U_c	10	10^3	Attains center
Gas velocity	V_c	1.05	2.36	Ditto
Density	U_d	220	10^5	Reflected shock wave
Shock wave velocity	η_d	1.1	2.4	Ditto

The real values of the parameters apparently lie somewhere between the values cited above. Similar results can be obtained for a cylindrical cumulative wave. Orig. art. has: 25 formulas.

ASSOCIATION: Gosudarstvennyy astronomicheskiy institut imeni P. K. Shternberga (State Astronomical Institute); Radiofizicheskiy institut Gor'kovskogo gosudarstvennogo universiteta (Radiophysics Institute of Gor'kiy State University)

SUBMITTED: 22Jan64

SUB CODE: AA

NO REF SOV: 004

ENCL: 00

OTHER: 002

Card 3/3

DIBAY, E.A.; YESIPOV, V.F.

Spectrum of the cometlike object Simeiz 129. Astron.zhur. 42
no. 2:281-282 M_r-Ap '65. (MIRA 18:4)

1. Gosudarstvennyy astronomicheskiy institut im. P.K.Shternberga.

DIBAY, E.A.

Investigating the cometary nebula Simeiz 129. Astron. zhur.

43 no. 1:52-59 Ja-F '66 (MIRA 19:2)

1. Gosudarstvennyy astronomicheskiy institut imeni P.K. Shternberga. Submitted March 22, 1965.

L 22667-66 FSS-2/LWT(1)/LWA(d)/T IJP(c) CW
 ACC NR: AP6006772 SOURCE CODE: UR/0033/66/043/001/0060/0062

AUTHORS: Grachev, N. I.; Dibay, E. A. 53

ORG: State Astronomical Institute im. P. K. Shternberg (Gos. astronomicheskii in-t) 2

TITLE: Spectrophotometry of the central part of the Lagoon nebula 125

SOURCE: Astronomicheskii zhurnal, v. 43, no. 1, 1966, 60-62

TOPIC TAGS: nebula, spectrophotometry, astronomic telescope, electron density, temperature

ABSTRACT: Spectral data on the Lagoon nebula were obtained in July-September 1964 by means of a diffraction spectrograph through a Cassegrain focus 125-mm telescope. Dispersion of the photographic zone of the spectrum was 140 Å/mm. A-650 and A-700 films were used with exposures of 15 to 90 minutes. The orientation angle of the slit was 17° and the slit height was 300". The Seaton method was used for determining the physical parameters. Two condensations in the central part of the nebula were studied. The electron temperature of the condensations was found to be 10 000°, of the surrounding nebula 9 000°.

Card 1/2

UDC: 523.161 2

L 22667-66

ACC NR: AP6006772

Electron density in the condensations is $1.6 \cdot 10^4 / \text{cm}^3$, in the surrounding nebula $250 / \text{cm}^3$. The total mass of the two condensations is 0.1 of the solar mass. The temperatures and concentrations obtained suggest that no secondary sources of radiation (stars) exist within the condensations. Orig. art. has: 2 figures and 1 table.

SUB CODE: 03/ SUBM DATE: 22Mar65/ ORIG REF: 004/ OTH REF: 002

Card 2/2 *W*

DIBELKA, F.

2

MALYPETROVA, B., DIBELKA, F.

CSHR

1st Stomatological Clinic of the Faculty for General Medicine at Charles
University, Prague (I. stomatologická klinika fakulty všeobecného
lékarství KU), director: docent Dr. J. Toman, CSc

Prague, Československá Stomatologie, No 1, 1963, pp 41-50

"On the Problem of Labial Occlusion".

DIBELKA, Frantisek, MUDr, klinicky asistent

Cooperation of orthodontists with oral surgeons. Cesk.stomat.
no.4-5:187-189 J1 '55.

1. Z I.stomatologicke kliniky lekarske fakulty Karlovy uni-
versity v Praze, prednosta, prof. MUDr. Jaromir Krecan.

(DENTISTRY, OPERATIVE.

cooperation with orthodontics)

(ORTHODONTICS,

cooperation with dent. surg.)

DIBELKA, F.

On the problem of the Crouzon-Apert syndromes. Cesk. stomat.
65 no.2:109-114 Mr '65

1. I. Stomatologicka klinika fakulty vseobecneho lekarstvi
Karlovy University v Praze (prednosta: prof. dr. J. Toman,
DrSc.)

DIBELKA, F.; MILOTOVA, J.

Contribution to the problem of the treatment of children with
Pierre Robin syndrome. Cesk. stomat. 65 no.6:413-418 N '65.

1. I. stomatologicka klinika fakulty vseobecneho lekarstvi
Karlovy University v Praze (prednosta prof. dr. J. Toman, DrSc.)
a I. detska klinika pediatricke fakulty Karlovy University v
Praze (prednosta prof. dr. J. Svejcar, DrSc.).

Strojirenstvi (Machinery)
Vol. 8, Nr. 3, 20. March 1958

Titelka 1: Standardization of tools for
extrusion.

Strojirenstvi, Vol. 8, No. 3, 1958, p. 207-211

Coil extrusion is one of the most efficient methods of modern technology which is steadily gaining popularity in machine building industries. The process is hampered by many difficulties among which lack of reasonable standardization of tools is very tangible. Workers are compelled to design and manufacture tools in their tool shops which sometimes have no adequate facilities. The author figures out substantial economy resulting from standardization. He explains leading principles of selected dimension line, as well as special merits of recommended design securing universal versatility and therefore high productivity.

4
2 {4F1
AE26

DIBELKA, J.

"Punching stands and universal punching tools. p. 17"

STROJIRENSKA VYROBA (Ministerstvo tezkeho strojirenstvi, Ministerstvo presneho strojirenstvi a Ministerstvo automobiloveho prumyslu a zemedelskych stroju) Praha, Czechoslovakia, Vol, 7, No. 1. 1959

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 6 June 1959
Uncl.

DIBELKA, J.

"Standards for vibrating devices used in expanding pipes." p. 229.

STROJIRENSTVI. (Ministerstvo tezkeho strojirenstvi, Ministerstvo presneho strojirenstvi a Ministerstvo automobiloveho prumyslu a zemedelskych stroju). Praha, Czechoslovakia, Vol. 9, No. 3, Mar. 1959.

Monthly list of East European Accessions (EEA1), LC, Vol. 8, No. 8,
August 1959.
Uncla.

Z/031/61/009/004/005/008
A121/A126

AUTHOR: Dibelka, Jan

TITLE: Standardization of the clamping parts of forming tools helps in production

PERIODICAL: Strojirenská výroba, no. 4, 1961, 184 - 187

TEXT: Problems of standardization of the clamping elements for parts to be formed are described. In case of a repeated machining using old dies a reducing holder for the clamping of the lower part a/o the upper part has to be used. Forging dies are clamped to spindle presses by means of upper and lower clamping plates with the proper clamping tools and steel screws. The forging crank press Maxi uses clamping frames with clamping straps and collet chucks (Figure 11). In standardization of the clamping parts of forming tools it is necessary to determine the dimensions and the division of the chucks and of the openings in the plungers of all machine types. The clamping parts should meet the following requirements: 1. Possibly high simplification of new designs and decrease of working intensity in their construction and production; 2. Saving of tool-steel; 3. Safe fastening of tools and prevention of possible disloca-

Card 1/3

Standardization of the clamping parts

Z/031/61/009/004/005/008
A121/A126

tion of the dies during operation; 4. Ensuring the clamping within the shortest period of time. The standardization of the clamping elements of the forging dies of drop hammers, block hammers and counter-blow forging hammers has to be sped up. The standardization of the chucking grooves and of the steel screws of the dies in spindle presses is simple. For all types of these presses two designs of upper clamping plates and three designs of lower clamping plates are applicable whereby each design has several standardized sizes for various forging dies. In series production, the mechanical crank presses Maxi are used, the clamping frames of which are already standardized. There are 11 figures. ✓

ASSOCIATION: Šmeralovy závod, n. p., VÚTS Brno (Šmeral Plants, People's Enterprise, VÚTS, Brno)

Figure 11: Clamping die in the holder for forgin in mechanical crank presses Maxi:
1 - upper part of the holder, 2 - upper plate of the holder, 3 - upper side edge,
4 - lower apron edge, 5 - upper clamping device, 6 - lower apron edge, 7 - upper
part of the die, 8 - lower part of the die, 9 - lower clamping device, 10 - lower

Card 2/3

DIBELKA, Ludvik

Continuous curves in the diagrams of price series. Podnik organizace
16 no.12:557-560 D '62.

1. Ministerstvo tezkého strojírenství.

YATSENKO, V., kand.tekhn.nauk; DIBENKO, G. [Dybenko, H.], inzh.

Laminated plastics. Znan.ta pratsia no.9:11-12 S '61.

(MIRA 14:8)

(Laminated plastics)